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EXAMINER

VILLECCO, JOHN M

ART UNIT PAPER NUMBER

2612

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,064

Applicant(s)

BATTLES ET AL.

Examiner

John M. Villecco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 3, "35 U.S.C. § 112 Rejection", filed January 6, 2005, with respect to the 112 rejection of claim 10 has been fully considered and are persuasive. The rejection of claim 10 has been withdrawn. However, an objection to the claim has been added.

2. Applicant's arguments, see page 3, "35 U.S.C. § 102 Rejection", filed January 6, 2005, with respect to the rejection(s) of claim(s) 1 using the Torikai reference (Japanese Publ. No. 2000-138854 A) have been fully considered and are persuasive. After reviewing the related U.S. Patent (U.S. Patent No. 6,822,683), it appears that the applicant is correct in their assertion that Torikai merely discloses turning on a backlight of a display when the finger is sensed by the touch sensor (14). Furthermore, neither the Torikai reference nor the Anderson reference specifically discloses a camera with a shutter button for generating both a touch signal and an actuation signal, where the touch signal and the actuation signal are separate and distinct. Therefore, the rejection of claims 1-6 has been withdrawn.

3. However, applicant's arguments filed January 6, 2005 with respect to claims 7 and 8 have been fully considered but they are not persuasive. In claim 7, applicant's phrasing of a "touch-sensitive shutter button" is sufficiently vague enough to be read on the two-step shutter button of Torikai. Upon the user touching the shutter button to actuate it, an image is captured and displayed on the display. Thus, the examiner is reading the actuation of the shutter button to be "a touch-sensitive shutter button responsive to contact of a user's finger thereon for producing a touch signal that causes said display to receive image data from said image sensor and display

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images corresponding thereto". Since the shutter button is inherently touched in order to actuate it, the shutter button is interpreted to be touch-sensitive. The same argument can be applied to claim 8.

4. For the reasons stated on the preceding page, the rejection of claims 7-12 from the previous office action will be repeated.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the specification fails to disclose that the display is selectively deactivated in accordance with the expiration of a timeout period.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Torikai (Japanese Publ. No. 2000-138854).**

8. Regarding *claim 7*, Torikai discloses a digital camera which includes a display (4), an image sensor (CCD, 1), and a memory card (9). The camera uses a touch sensor (14) to determine if a user is touching the shutter release button (11). If it is determined that the user is

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touching the shutter release button (11), the display (4) is turned on in anticipation of an image capture. Then, the user actuates the shutter button (11). Upon the user touching the shutter button to actuate it, an image is captured and displayed on the display. Thus, the examiner is reading the actuation of the shutter button to be “a touch-sensitive shutter button responsive to contact of a user’s finger thereon for producing a touch signal that causes said display to receive image data from said image sensor and display images corresponding thereto”. Since the shutter button is inherently touched in order to actuate it, the shutter button is interpreted to be touch-sensitive. The display then displays the images captured by the CCD (1). See paragraphs 0018-0024. Please see the related U.S. application – U.S. Patent No. 6,822,683).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torikai (Japanese Publ. No. 2000-138854) in view of Anderson (U.S. Patent No. 6,122,003).**

11. Regarding **claim 8**, Torikai discloses a digital camera which includes a display (4), an image sensor (CCD, 1), and a memory card (9). The camera uses a touch sensor (14) to determine if a user is touching the shutter release button (11). If it is determined that the user is touching the shutter release button (11), the display (4) is turned on in anticipation of an image capture. Then, the user actuates the shutter button (11). Upon the user touching the shutter

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button to actuate it, an image is captured and displayed on the display. Thus, the examiner is reading the actuation of the shutter button to be “a touch-sensitive shutter button responsive to contact of a user’s finger thereon for producing a touch signal that causes said display to receive image data from said image sensor and display images corresponding thereto”. Since the shutter button is inherently touched in order to actuate it, the shutter button is interpreted to be touch-sensitive. The display then displays the images captured by the CCD (1). See paragraphs 0018-0024. Please see the related U.S. application – U.S. Patent No. 6,822,683).

Torikai does disclose that after capture of the image, the camera is returned to the standby state (paragraph 0031). Torikai, however, fails to disclose displaying stored data when there is no touch signal generated by the touch-sensitive shutter button. Anderson, on the other hand, discloses a digital camera (110) which includes an image sensor (224), a removable memory (354), a display (402) for displaying recorded or live images, and a shutter button (418) capturing an image and/or switching operation modes. More specifically, as disclosed in column 7, line 44 to column 8, line 13, Anderson discloses an embodiment in which an actuation of the shutter button (418) allows a user to capture an image no matter what mode the camera may be in. When the camera is in the review or play mode and the two-step shutter button is switched to the S1 position, the camera is automatically switched to the capture mode so that an image capture opportunity is not missed. Therefore, upon actuation of the shutter button (418) to the S1 position, an image is displayed from the image sensor. Then when the shutter button is pressed to the S2 position the image data is stored in the storage medium (354). After image capture, the user is capable of returning to a review of play mode by depressing the navigation buttons. However, one of ordinary skill in the art would have found it obvious to revert back to the

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previous operating mode without user interaction, thus reducing the number of operations performed by the user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to revert back to a mode of displaying images from the memory card so that the user is placed back into the mode that they were in prior to the image capture.

12. As for *claim 11*, Anderson discloses that the storage medium includes stored image data and menu data. Anderson discloses that, in the review mode, menu data in the form of image thumbnails are display in the LCD. See column 6, lines 1-36.

13. With regard to *claim 12*, Torikai discloses that the touch-sensitive shutter button is a two-step shutter button in which an image is captured when the shutter button is actuated to an S2 state. See paragraphs 0016 and 0028.

14. **Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torikai (Japanese Publ. No. 2000-138854) in view of Anderson (U.S. Patent No. 6,122,003) and further in view of Hirasawa (U.S. Patent No. 6,091,450).**

15. With regard to *claim 9*, as mentioned above in the discussion of claim 8, both Anderson and Torikai disclose all of the limitations of the parent claim. However, neither of the aforementioned references discloses determining if a users eye is near an optical viewfinder and, if it is, turning the display off. Hirasawa, on the other hand, discloses that it is well known in the art to turn off a display if the user is using a viewfinder. More specifically, Hirasawa discloses an electronic viewfinder (107) for viewing an image of the object to be picked up. The electronic viewfinder (107) includes proximity of eye detecting portion (100) which detects if the

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user is using the electronic viewfinder or not. If the user is using the electronic viewfinder, then the display (115) is turned off. This feature allows the camera to conserve battery power when the viewfinder is in use. Therefore, it would have been obvious to one of ordinary skill in the art to include a viewfinder capable of detecting the presence of a users eye, and then turning off the display if the viewfinder is in use. Although Hirasawa only discloses an electronic viewfinder, the same idea could easily have been implemented into an optical viewfinder. One of ordinary skill in the art would have found it obvious to implement this in an optical viewfinder in order to reduce costs.

16. **Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torikai (Japanese Publ. No. 2000-138854) in view of Anderson (U.S. Patent No. 6,122,003) and further in view of Daigaku (Japanese Publ. No. 11-252488).**

17. With regard to *claim 10*, as mentioned above in the discussion of claim 8, both Anderson and Torikai disclose all of the limitations of the parent claim. However, neither of the aforementioned references specifically discloses that the display is selectively deactivated in accordance with a timeout period. Daigaku, on the other hand, discloses that it is well known in the art to turn off the power supply to a display device when operation is not performed for a 1st set time. See the abstract. This feature allows a camera to conserve battery power. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to turn off the display if not in use for a set amount of time in order to conserve battery power.

Allowable Subject Matter

18. Claims 1-6 are allowed.

19. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, the primary reason for allowance is that the prior art fails to teach or reasonably suggest a touch-sensitive shutter button producing a touch signal in response to the touching of a user's finger on the button, and producing an actuation signal upon actuation of the button by a user, and a processor responsive to the touch signal to cause the display to display an image from the image sensor, responsive to the actuation signal to cause image data from the image sensor device to be stored in the storage medium, and responsive to the absence of the touch signal to cause the display to display an image and/or related data from the storage medium.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John M. Villecco
June 13, 2005



AUNG MOE
PRIMARY EXAMINER